

15949 U.S. PTO
041405

1/19

+

BEST AVAILABLE COPY

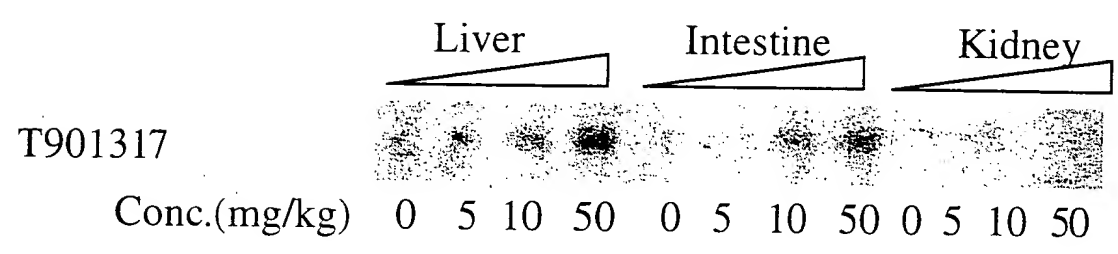
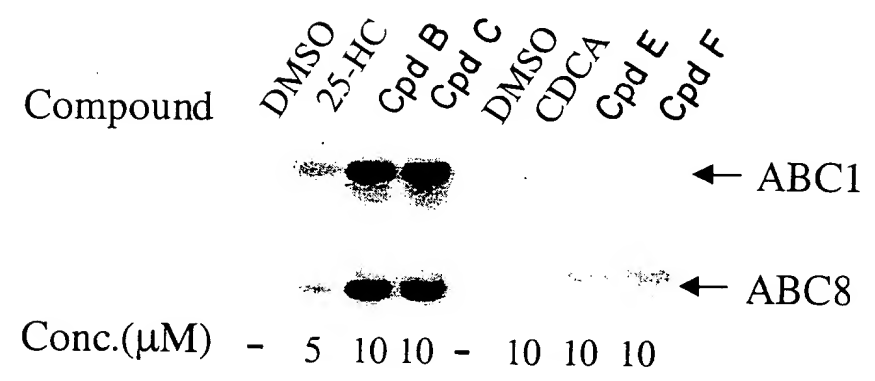


FIG. 1.



LXR agonist: Cpd B, C
FXR agonist: Cpd E, F

FIG. 2.

+

2/19

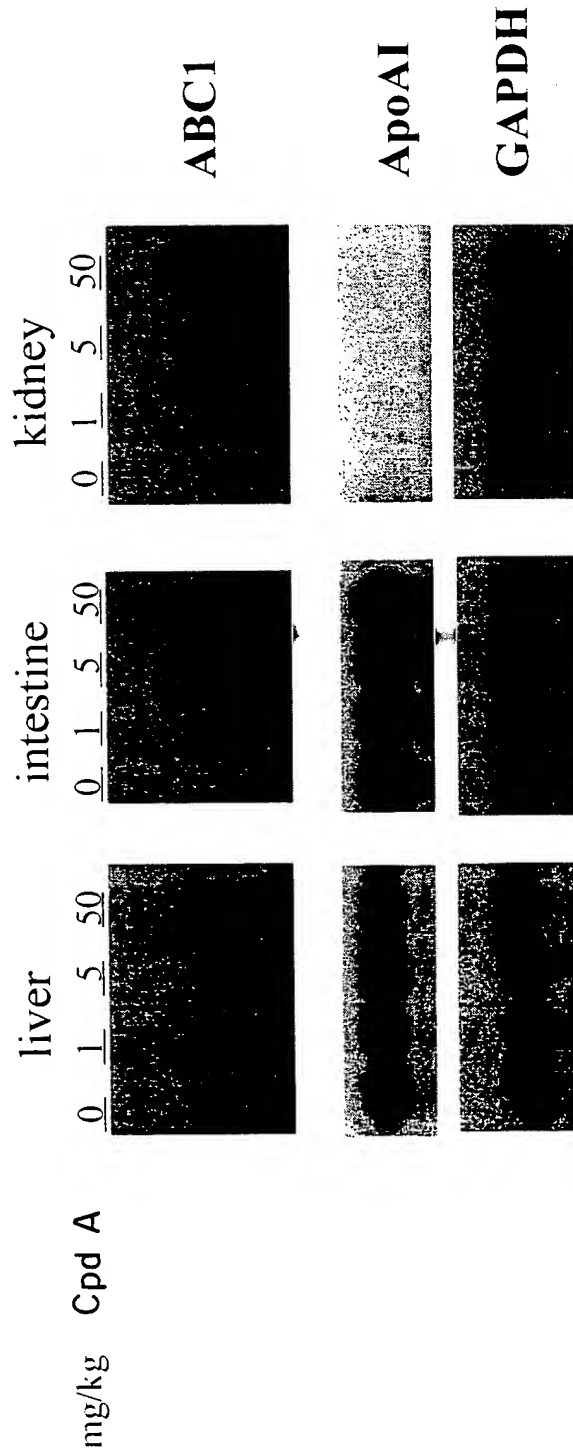


FIG. 3.

3/19

+

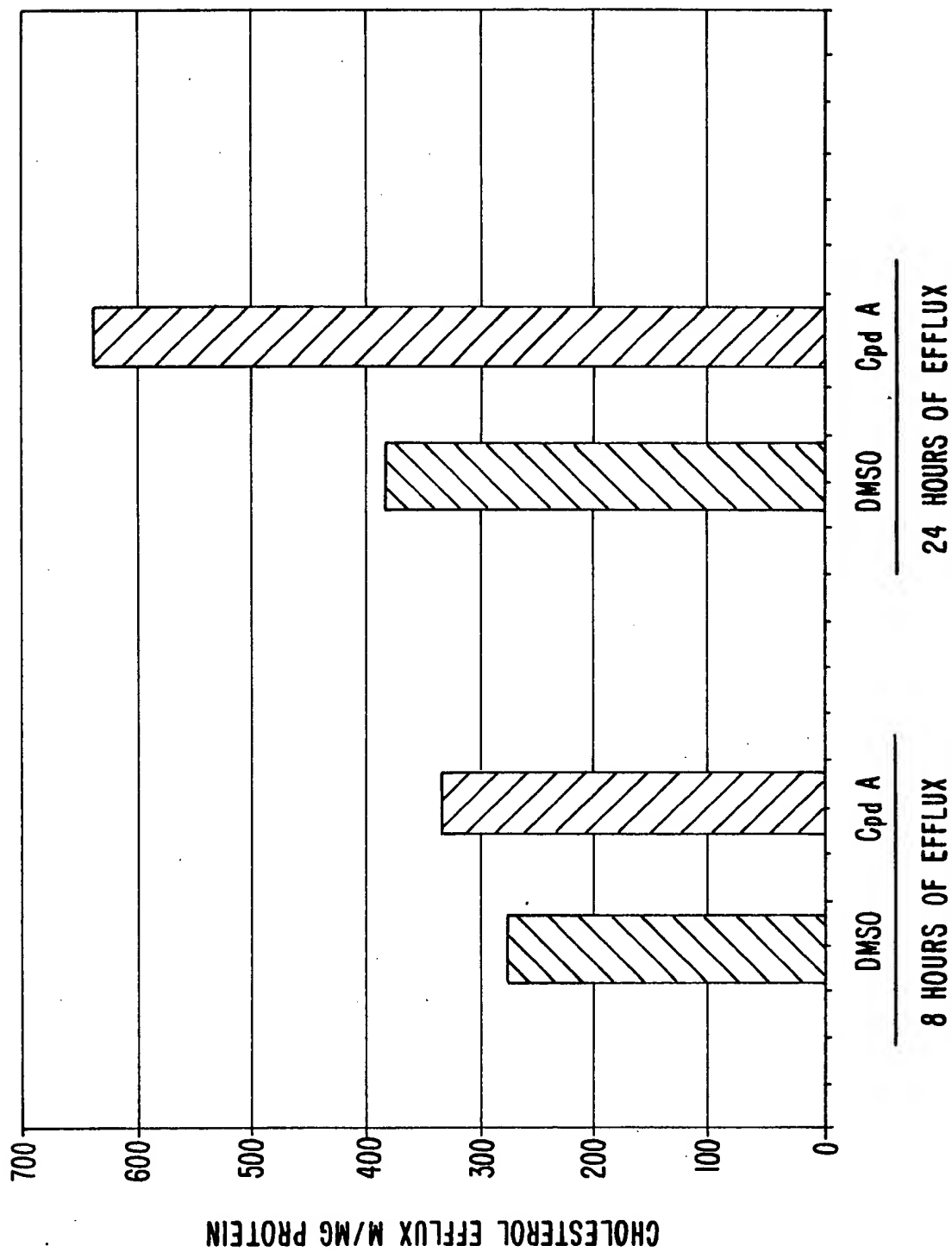


FIG. 4.

4/19

+

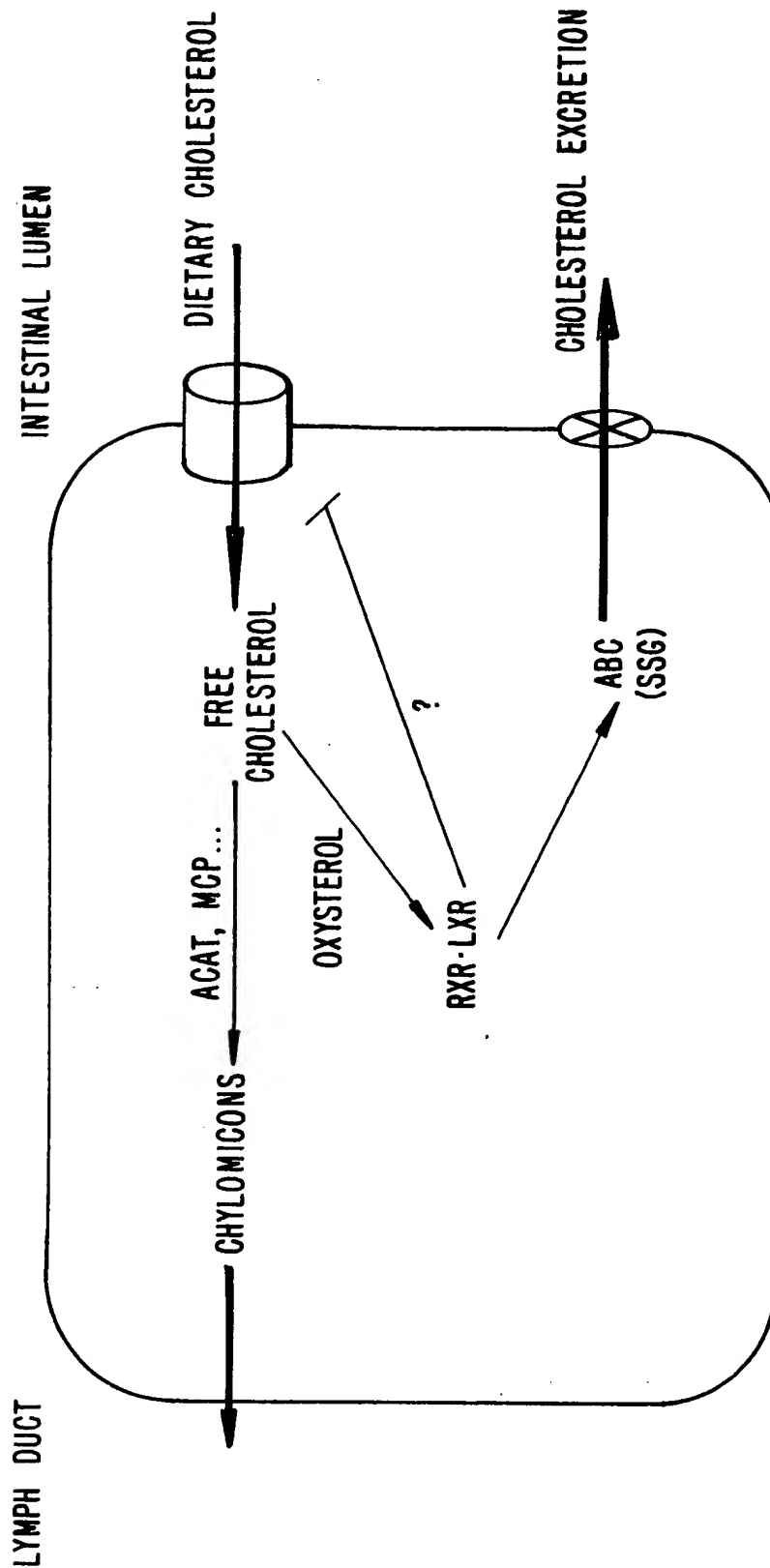
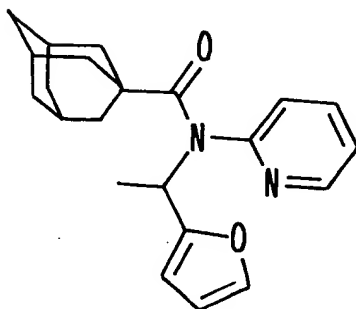


FIG. 5.

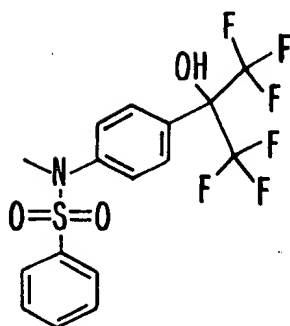
+

5/19

COMPOUND C



COMPOUND B



COMPOUND A

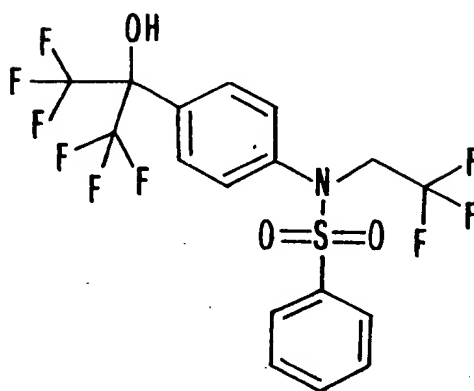


FIG. 6.

ACAGGCCACTAGAAAATTCACCTTGCAATTGCTTCCTGCTAGCCATGGGTGAGTGCCCTTTCTGAGTCCAGAGGGAGCCAGAGGGCCCTCACA 95
M G E L P F L S P E G A R G P H
ACAGAGGCTCTGAGCTCCCTGGAGCAAGGTTCCGTCACGGGCACAGAGGCTCGGCACAGCTTAGGTGTCTCCTGTCATGTGTCTACAGCGTC 190
N R G S L S L E Q G S V T G T E A R H S L G V L H V S Y S V
AACCGTGTGGGCCCTTGGTGAACATCAAAATCATGCCAGCAGAAGTGGACAGGCAAAATCCTCAAAGATGTCTCCTTGTACATCGAGAGTGG 285
N R V G P W N I K S C Q Q K W D R Q I L K D V S L V I E S G
GATTATGTGCATCTTAGGCAGCTCAGGCTCAGGGAAGACACGCTGCTGGACGCCATCTCCGGGAGGCTGCGGCGCACTGGGACCCCTGGAAG 380
I M C I L G S S G S G K T T L L D A I S G R L R R T G T L E
AGGTGTTTGTGAATGGCTGCGAGCTGCGCAGGACCAAGTCCCAAGACTGCTTCTCCTACGTCTGACGAGCGACGTTTCTTGAGCAGCCTC 475
E V F V N G C E L R R D Q F Q D C F S Y V L Q S D V F L S S L
GTGCGGAGACGTTGCGATACACAGCGATGCTGGCCCTCTGCCGAGCTCCGCGGACTTCTACAAACAAGAAGGTAGAGGCAGTCATGACAGA 570
V R E T L R Y T A M L A L C R S S A D F Y N K K V E A V M T E
GAGCCTGAGCCACGTGGCGGACCAAAATGATTGGGAGCTATAATTTTGGGGAATTTCCAGTGCGGAGCGCGCGAGTTTCCATCGCAGCCCC 665
S L S H V A D Q M I G S Y N F G G I S S G E R R R V S I A A
TCCTTCAGGACCCCAAGTCATGCTAGATGAGCCCAACACAGGACTGGACTGCATGCAAAATCAAATGTCTCTTCTTGGCTGAG 760
L L Q D P K V M L D E P T T G L D C M T A N Q I V L L L A E
GCTCGCAGGGACCGAATTGTGATTGTACCATCCACCGCTCGCTCTGAGCTCTTCCAAACACTTCGACAAAAATTGCCATCCTGACTTACGG 855
A R R D R I V I V T I H Q P R S E L F Q H F D K I A I L T Y G
GTTGGTGTCTGTGGCACCCTGAGGAGATGCTTGGCTTCTTCAATAACTGTGGTTACCCCTGTCTCTGAACATTCCAATCCCTTGTATTTT 950
L V F C G T P E E M L G F F N N C G Y P C P E H S N P F D F
TGGAATGACATCAGTGGACACCCAAAGCAGAGCGGGAAATAGAAACGTACAAGCGAGTACAGATGCTGGAATGTGCCTTCAAGGAATCT 1045
M D L T S V D T Q S R E R E I E T Y K R V Q M L E C A F K E S

FIG. 7A.

+

ATCTATCACAAAATTCTGGAGAACATTGAAAGAGCACGATACCTGAAACCTTACCCATGGTTCCCTTTCAAAAACAAAAGATCCTCCTGGGAT 1140
I Y H K I L E N I E R A R Y L K T L P M V P F K T K D P P G M
'CGGCAAGCTTGGTGTCTCTGAGCGAGTAACAAGAACTTAATGAGGAATAAGCAGGCAGTGATTATGCGTCTCGTTTCAGAAATCTGATCA 1235
' G K L G V L L R R V T R N L M R N K Q A V I M R L V Q N L I
'GCCTCTTCTCATTTTCTACCTTCTCCGCGTCCAGAACACACGCTAAAGGGCGCTGTGCAGGACCGCGTGGGGCTGCTCTATCAGCTTGTG 1330
G L F L I F Y L L R V Q N N T L K G A V Q D R V G L L Y Q L V
'GCCACCCCATACACCGGCATGCTCAATGCTGTGAATCTGTTCCTCATGCTGAGAGCCGTCAGCGACCAAGGAGAGTCAGGATGGCCTGTATCA 1425
A T P Y T G M L N A V N L F P M L R A V S D Q E S Q D G L Y H
'GTGGCAGATGCTGCTCGCCTACGTGCTACACGTCCTCCCTTTCAGCGTCATCGCCACGGTCATTTTCAGCAGTGTGTATTGGACTCTGG 1520
' W Q M L L A Y V L H V L P F S V I A T V I F S S V C Y W T L
'TGTATCCTGAAGTTGCCAGATTGGATATTCTCTGCTGCTCTTTTGGCCCCCTCACTTAATTGGAGAAATTTCTAACACTTGTGCTGTGGT 1615
L Y P E V A R F G Y F S A A L L A P H L I G E F L T L V L L G 7/19
'GTCCAAAACCCCTAATATGTCAACAGTATAGTGGCTCTGCTCAGCATCTCTGGGCTGCTTATTGGATCTGGATTATCAGAAACATACAAGA 1710
V Q N P N I V N S I V A L L S I S G L L I G S G F I R N I Q E
GCCCATTCCTTTAAAAATCCTGGGTTATTTTACATTCCAAAAATACTGTTGTGAGATTCTCGTGGTCAATGAGTTTACGGCCTGAACTTCA 1805
P I P L K I L G Y F T F Q K Y C C E I L V V N E F Y G L N F
GTGGTGGATCCACACCTCTATGCTAAATCACCCGATGTGCGCCATCACCCAAAGGGTCCAGTTCATCGAGAAAACCTGCCCAGGTGCTACA 1900
C G G S N T S M L N H P M C A I T Q G V Q F I E K T C P G A T
AGATTACGGCAAACCTTCCTCATCTTATATGGGTTTATCCAGCTCTGTCATCCTAGGAATAGTGATTTTAAAGTCAGGGACTACCTGAT 1995
R F T A N F L I L Y G F I P A L V I L G I V I F K V R D Y L I
CAGATAGTTAAGATGACAGGCAGGAAAGGGTTAATGGGCAGGCACGCCCTGCTGGAGCACAGAGAAGTACTGTCTTCAACCATCAGGATC 2090
R X>

FIG. 7B.

+

CTGGACCCCTTGCTGTCTATCCGGAGCCCCAAGGGCAACGAGAACTCACAGCCCTCTGCTATTCCAGCTTGTTGGGCAAT 2185
GTGCTTGGACATTGTGACTGACTGCTCAATAATGTAATAATAATAATTCATAAACCTACAGGACATT 2258

FIG. 7C.

AGGTGAGCAGGCGAGTCTGCCACGGGCTCCCCAACTGAAGCCACTCTGGGGAGGGTCCGGCCACCAGAAAATTGCCCCAGCTTTGCT 95
TGTGGCCATGGGTGACCTCTCATCTTTGACCCCCGGAGGGTCCATGGGTCTCCAAGTAAACAGAGGCTCCAGAGCTCCCTGGAGGGGCT 190
M G D L S S L T P G G S M G L Q V N R G S Q S S L E G A
GCCACCGCCCCGAGCCTCACAGCCTGGGCATCCTCCATGCCTCCTACAGCGTCAGCCACCGCGTGAGGCCCTGGTGGACATCACATCTTG 285
A T A P E P H S L G I L H A S Y S V S H R V R P W D I T S C
GCAGAGTGGACCGCAGATCCTCAAAGATGTCTCCTTGTACGTGGAGAGCGGGCAGATCATGTGCATCCTAGGAAGCTCAGGCTCCGGGA 380
Q Q W T R Q I L K D V S L Y V E S G Q I M C I L G S S G S G
CCACGCTGCTGACGCCATGTCCGGGAGGCTGGGCGCGCGGGACCTTCCTGGGGAGGTGTATGTGAACGGCCGGCGCTGCCGCCGGGAG 475
T T L L D A M S G R L G R A G T F L G E V Y V N G R A L R R E
TTCAGGACTGCTTCTCCTACGTCTGCAGAGCGACACCCCTGCTGAGCAGCCTCACCGTGCGCGAGACGCTGCACCTACACCGCGCTGCTGGC 570
F Q D C F S Y V L Q S D T L L S S L T V R E T L H Y T A L L A
CCGCCGGGCAATCCCGGCTCCTCCAGAAGAAGGTGGAGGCCGTCATGGCAGAGCTGAGTCTGAGCCATGTGGCAGACCGACTGATTGGCA 665
R R G N P G S F Q K K V E A V M A E L S L S H V A D R L I G
ACAGCTTGGGGGCATTTCACGGGTGAGCGCGCGGGTCTCCATCGCAGCCCCAGCTGCTCCAGGATCCTAAGTGCATGCTGTTGATGAG 760
Y S L G G I S T G E R R R V S I A A Q L L Q D P K V M L F D E
ACCACAGCCTGGACTGCTGCTAATCAGATTGTGCTCCTCCTGTTGGAAGTGGCTCGCAGGAACCGAATTGTGGTTCTCACCATTCA 855
T T B L D C M T A N Q I V V L L V E L A R R N R I V V L T I H

FIG. 8A.

+

AGCCCCGTTCTGAGCTTTTTCAGCTCTTTTGACAAAATTGCCATCCTGAGCTTCGGAGAGCTGATTTTCTGTGGCAGCCAGCGGAAATGCTTG 950
P R S E L F Q L F D K I A I L S F G E L I F C G T P A E M L
TCTTCAATGACTGGGTTACCCCTTGCTGAACATTCAAACCCCTTTGACTTCTATATGGACCTGACGTCAGTGGATACCCAAAGCAAGGAA 1045
F F N D C G Y P C P E H S N P F D F Y M D L T S V D T Q S K E
GAAATAGAAACCTCCAAGAGAGTCCAGATGATAGAATCTGCCTACAAGAAATCAGCAATTTGTCATAAACTTTGAAGAATATTGAAAGAAT 1140
E I E T S K R V Q M I E S A Y K K S A I C H K T L K N I E R M
ACACCTGAAAAACGTTACCAATGGTTCCCTTCAAAACCAAGATTTCTCTGGAGTTTCTCTAAACTGGGTGTTCTCTCTGAGGAGAGTGACAA 1235
H L K T L P M V P F K T K D S P G V F S K L G V L L R R V T
ACTTGGTGAGAAATAAGCTGGCAGTGATTACGCGTCTCCTTCAGAATCTGATCATGGGTTTGTTCCTCCTTTTCTTCGTTCTCGGGTCCGA 1330
N L V R N K L A V I T R L L Q N L I M G L F L L F F V L R V R
AATGTGCTAAAGGTGCTATCCAGGACCGCGTAGGTCTCCTTTACCAGTTTGTGGGCGCCACCCCGTACACAGGCATGCTGAACGCTGTGAA 1425
N V L K G A I Q D R V G L L Y Q F V Q A T P Y T G M L N A V N
GTTTCCCGTGTGCGAGCTGTACGCGACCAAGAGAGTACGAGCGCCTCTACCAAGAGTGGCAGATGATGCTGGCCTATGCACTGCACGTCC 1520
F P V L R A V S D Q E S Q D G L Y Q K W Q M M L A Y A L H V
CCTTCAGCGTTGTTGCCACCATGATTTTCAGCAGTGTGTCTACTGGACGCTGGGCTTACATCCTGAGGTTGCCCGATTGGATATTTTCT 1615
P F S V V A T M I F S S V C Y W T L G L H P E V A R F G Y F S
GCTCTCTTGGCCCCCCTTAATTGGTGAATTTCTAACTCTTGTGCTACTTGGTATCGTCCAAAATCCAAATATAGTCAACAGTGTAGTGC 1710
A L L A P H L I G E F L T L V L L G I V Q N P N I V N S V V A
GCTGTCCATTGCGGGGGTGTGTTGGATCTGGATTCCCTCAGAAACATACAAGAAATGCCCATTCCTTTTAAATCATCAGTTATTTTACAT 1805
L S I A G V L V G S G F L R N I Q E M P I P F K I I S Y F T
AAAAATATTGCAGTGAGATTCTTGTAGTCAATGAGTTCTACGGACTGAATTTTCACTTGTGGCAGCTCAAATGTTTCTGTGACAACTAATCCA 1900
Q K Y C S E I L V V N E F Y G L N F T C G S S N V S V T T N P

FIG. 8B.

+

TGTGCCCTTCACTCAAGGAATTCAATTGAGAAAAACCTGCCCCAGGTGCAACATCTAGATTCAACAATGAACCTTTCTGATTTTGTATTCATT 1995
C A F T Q G I Q F I E K T C P G A T S R F T M N F L I L Y S F
TCCAGCTCTTGTCAATCCTAGGAATAGTTGTTTCAAAAATAAGGGATCATCTCATTTAGCAGGTAGTGAAAGCCCATGGCTGGGAAAAATGGAAGT 2090
P A L V I L G I V V F K I R D H L I S R X>
GCTGCCGACTGTGCATGACTGCTCTGAACGCTCTGAAATGAGAGTGCCATGTATTTCTTTTGACAGGACATCTCAAGTCTTTTAACCATTA 2185
CTCCATTGTGTCCTCTTGGATCCAAGCAGGCCCTTGAATGCAATGGAAAGTGGTTTATAGTCCCTTGCTCTTACAACCTTGCAGGGACATGTGGT 2280
TTGGAAATTGTGACTGAGCGGACCCCAAGAATGTAAATAATATTCATAAACCTATGGG 2340

FIG. 8C.

10/19

+

G.pro	MGDLSSLTTPG	GSMGLQVNRG	QSLSLEGAPA	TAPEP-HSLG	ILHASYSVSH	RVRPWWDITS	CROQWTRQIL	KDVSLEYV	ESG	79
G.pro	MGELPFLSEPE	GARGPHINRG	SLSSLEQGSV	TGTEARHSLG	VLHVSYSVSN	RVGPEWNNIKS	COQKMDROIL	KDVSLEYV	ESG	80
G.pro	QIMCILGSSG	SGKTTLLDAM	SGRIGRAGTF	IGEVYVNGRA	LRREQFQDCF	SYVLQSDTLL	SSLTVRETLH	YTALLAIRRG	159	
G.pro	QIMCILGSSG	SGKTTLLDAI	SGRIRRTGTL	EGEVFVNGCE	LRRDQFQDCF	SYVLQSDVFL	SSLTVRETLR	YTAMLALCRS	160	
G.pro	NPGSFQKKVE	AVMAEELSLSH	VADRLLIGNYS	IGGISTGERR	RVSIAAQLLQ	DPKVMLEFDEP	TTGLDCMTAN	QIVMLIVEELA	239	
G.pro	SADFYNNKKVE	AVMTLELSLSH	VADQMIGSYN	EGGISSGERR	RVSIAAQLLQ	DPKVMLEFDEP	TTGLDCMTAN	QIVMLIAELA	240	
G.pro	RNRIRIVLTI	HQPRSELFOL	FDKIAILSFG	ELIFCGTPAE	MIDFFNDCGY	PCPEHSNPF	FYMDLTSVDT	QSKEREIETS	319	
G.pro	RDRIRIVLTI	HQPRSELFQH	FDKIAILTYG	ELVFCGTTEE	MIGFFNDCGY	PCPEHSNPF	FYMDLTSVDT	QSPEREIETY	320	
G.pro	KRVQMIESAY	RKSAIICHKITL	KNIERMKHLK	TLPMVPFCTK	DSPGVFSKLG	VLLRRVTRNL	VRNKLAVITR	ILQNLIMGLF	399	
G.pro	KRVQMLECAF	KESDIYHKITL	ENIERARYLK	TLPMVPFCTK	DPPGMEGKLG	VLLRRVTRNL	MRNKQAVIMR	ILQNLIMGLF	400	
G.pro	ILIFVLRVRS	NVLKGAHQDR	VGLLYQFVGA	TPYTGMLNAV	NLFFVLRVRS	DOESQDGLYQ	KWQMLLAYAL	HVLPFSVAT	479	
G.pro	ILIFVLRVQN	NTLKGAMQDR	VGLLYQLVGA	TPYTGMLNAV	NLFFVLRVRS	DOESQDGLYH	KWQMLLAYVL	HVLPFSVAT	480	
G.pro	MISSVVCYWT	LGLHPEVARE	GYFSAALLAP	HLIGEFLLTV	LLGIVQNPNI	VNSMVALLSI	AGMLVSGGFL	RNIQEMPIPF	559	
G.pro	VLFSSVVCYWT	LGLYPEVARE	GYFSAALLAP	HLIGEFLLTV	LLGIVQNPNI	VNSMVALLSI	SGILLGSGFI	RNIQEMPIPL	560	
G.pro	KLISYFTFQK	YCSEILVVNE	FYGLNFTCGS	SNVSVTTNPM	CAFTQGIQFI	EKTCPGATSR	FTMNFLLILYS	FIPALVILGI	639	
G.pro	KILGYFTFQK	YQCEILVVNE	FYGLNFTCGG	SNVSMLNHPM	CAFTQGVQFI	EKTCPGATSR	FTANFLILYG	FIPALVILGI	640	
G.pro	VMEKIRDLHI	SR							651	
G.pro	VIEKVRDYLI	SR							652	

FIG. 9.

+

+

12/19

Reference Number: 6711
Stanford RH Panel: TNG4
Lowest LDD Reported: 5
Chromosome Value: 0

Results for HT

Submitted

Vector:00010000000001000100001010010000000100000010001000
0000000010000000000001000000000001000100

SHGCNAME CHROM# LOD_SCORE DIST. (cRs)

1 SHGC-36672 2 7.52 35

Vector:00000000R00001010100100010011100000100000010001000
0000001010000000000001000000000R01000100

2 SHGC-8189 2 6.53 44

Vector:00000000100001010100100010011100000100000010001000
0000001010000000000001000000000101000100

3 SHGC-699 2 6.03 48

Vector:00010000000001000100001010010100100001000110001000
1000001010000000000000000100000011000100

The number of markers searched was 32440

FIG. 10.

13/19

+

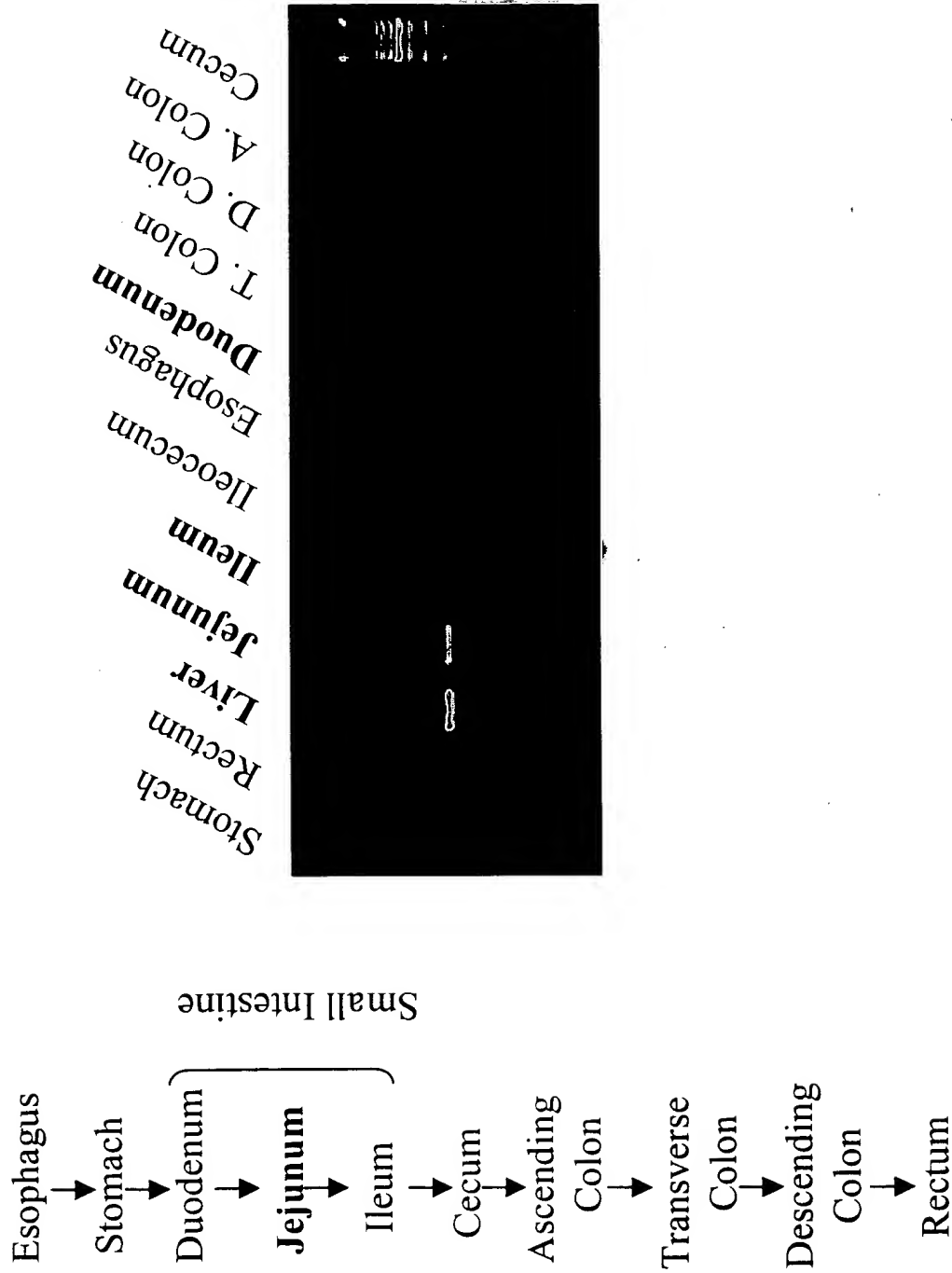


FIG. 11.

14/19

Thymus
Testis
Spleen
S. Intestine
Prostate
PBL
Ovary
Colon
S. Muscle
Placenta
Pancreas
Lung
Liver
Kidney
Heart
Brain

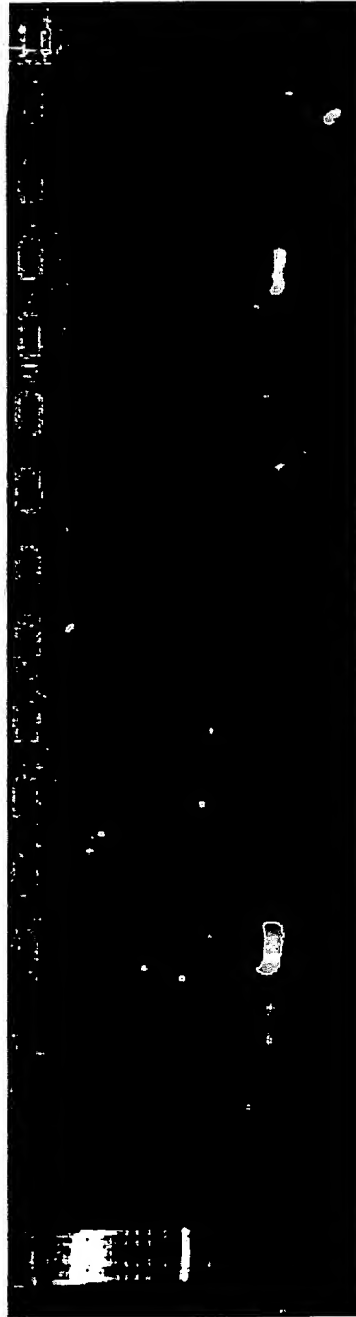


FIG. 12.

15/19

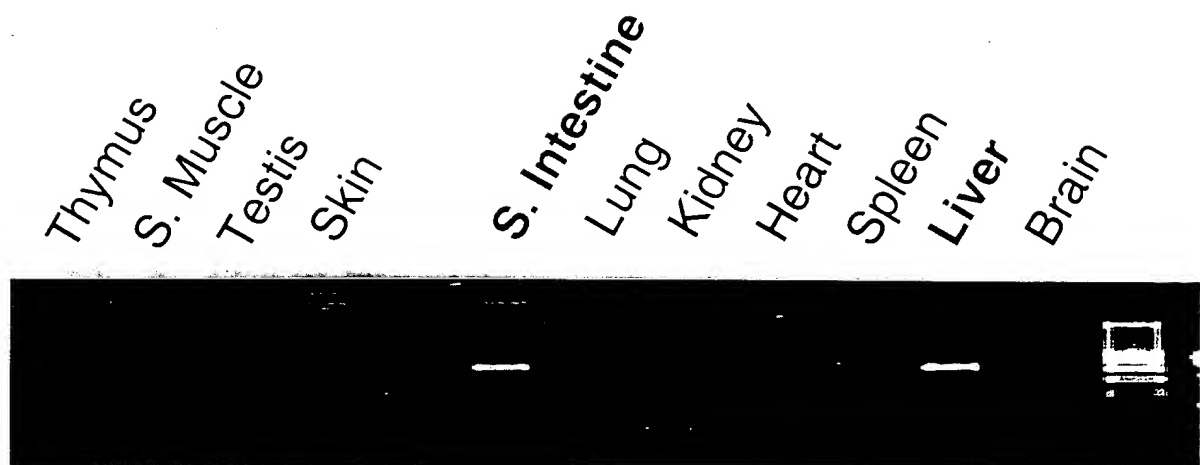


FIG. 13.

16/19

+

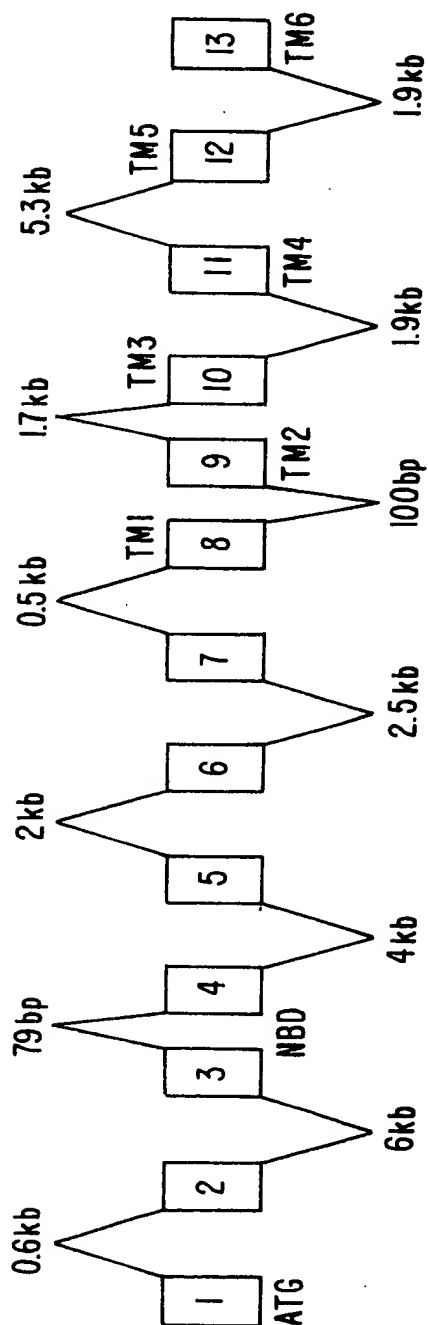


FIG. 14A.

AGGTGGAGCAGGCGAGTCTGCCACGGGCTCCCCAACTGAAGCCACTCTGGGAGGGTCCGGCCACCAGAAAATTGCCCAGCTTTGCTGCCT
-----EXON 1-----
GGCCATGGGTGACCTCTCATCTTTGACCCCCGGAGGGTCCATGGGTCTCCAAGTAAACAGAGGCTCCCAGAGCTCCCTGGAGGGGGCTCCTGCCAC
-----EXON 1-----
CCCGAGCCTCACAGCCTGGCATCCTCCATGCCCTACAGCGTCAGCCACCGCTGAGGCCCTGGTGGACATCACATCTTGCCGGCAGCAGTG
-----EXON 1-----
CAGGCAGATCCTCAAAGATGTCTCCTTGTACGTGGAGAGCGGGCAGATCATGTGCATCCTAGGAAGCTCAGGCTCCGGGAAAACACGCTGCTGGA
-----EXON 2-----
CATGTCCGGAGGCTGGGCGCGGGGACCTTCCTGGGGAGGTGTATGTGAACGGCCGGCGCTGCGCCGGGAGCAGTTCAGGACTGCTTCTC
-----EXON 3-----
CGTCTGCAGAGCGACACCCCTGCTGAGCAGCCTCACCGTGGCGAGACGCTGCACACTACACCGCGCTGTGGCCATCCGCCGCGCAATCCCGGCTC
-----EXON 3-----
CCAGAAGAAGGTGAGGCCGTGATGGCAGAGCTGAGTCTGAGCCATGTGGCAGACCGACTGATTGGCAACTACAGCTTGGGGGGCATTTCCACGGG
-----EXON 4-----
GCGGCGCGGGTCTCCATCGCAGCCAGCTGCTCCAGGATCCTAAGGTCATGCTGTTGATGAGCCAAACACAGCCTGGAATGCTGCTAA
-----EXON 5-----
GATTGTCCTCCTGGTGGAACTGGCTCGCAGGAACCCGAATTGTGGTTCTCACCATTACCCAGCCCCGTCTTGAGCTTTTTCAGCTTTTGACA
-----EXON 6-----
TTGCCATCCTGAGCTTCGGAGAGCTGATTTTCTGTGGCAGCCAGCGGAAATGCTTGATTCTTCAATGACTGCGGTTACCCCTTGTCCTGAACATT
-----EXON 7-----
ACCCCTTTGACTTCTATATGGACCTGACGTGAGTGGATACCCAAAGCAAGGAACGGGAAATAGAAAACCTCCAAGAGAGTCCAGATGATAGAATCTG
-----EXON 7-----

FIG. 14B. (1 OF 3)

+

'ACAAGAAATCAGCAATTGTCAATAAACTTTGAAGAATATTGAAAGAAATGAAACACCTGAAACCGTTACCAATGGTTCCCTTTCAAAACCAAGATT
-----EXON 8-----
'CTGGAGTTTCTCTAAACTGGGTGTTCTCCTGAGGAGTGACAAGAACTTGGTGAGAAATAAGCTGGCAGTGATTACGCGTCTCCTTCAGAATC
-----EXON 8-----EXON 9-----
'TCATGGGTTTGTTCCTCCTTTCTTCGTTCTGCGGGTCCGGAAGCAATGTGCTAAAGGTGCTATCCAGGACCGCGTAGGTCTCCTTTACCAGTTTG
-----EXON 9-----
'GCGCCACCCCGTACACAGGCATGCTGAACGCTGTGAATCTGTTTCCCGTGCTGCGAGCTGTCAAGCGACCGAGAGTCAAGGACGGCCTCTACCAGA
-----EXON 9-----EXON 10-----
'GCGAGATGATGCTGGCCTATGCACCTGCACGTCCTCCCTTCAGCGTTGTTGCCACCATGATTTTCAGCAGTGTGTGCTACTGGACGCTGGGCTTAC
-----EXON 10-----EXON 11-----
'CAAATATAGTCAACAGTGTAGTGGCTCTGCTGCCATTGCGGGGGTGCTTGTGGATCTGGATTCCTCAGAAACATACAGAAATGCCCATTCCTT
-----EXON 11-----EXON 12-----
'AAATCATCAGTTATTACATTCCAAAAATATTGCAGTGAGATTCTTGTAGTCAATGAGTTCTACGGACTGAATTTCACTTGTGGCAGCTCAAATG
-----EXON 12-----EXON 13-----
'CTGTGACAACTAATCCAATGTGTGCCTTCACTCAAGGAATTCAATTCAATTGAGAAACCTGCCCGAGGTGCAACATCTAGATTCACAATGAACCTTC
-----EXON 13-----
'TTTGTATTCAATTCAGCTCTTGTCACTCCTAGGAATAGTTGTTTTTCAAAATAAGGGATCATCTCATTAGCAGGTAGTGAAAGCCATGGCTGG
-----EXON 13-----
'AATGGAAGTGAAGCTGCCGACTGTGCATGACTGCTGAACGCTGAAATGAGAGTGCCATGTATTCTTTTGTGACAGGACATCTCAAGTCTTTT
-----EXON 13-----

FIG. 14B. (2 OF 3)

+

19/19

+

CATTAAAGACTCCATTGTGCCCTCTTGGATCCCAAGCAGGCCCTTGAATGCAATGGAAGTGGTTATAGTCCCTTGCTCTTACAACCTTGCAAGGACATG
-----EXON 13-----

TTATTGGAAATTGTGACTGAGCGGACCCCAAGAATGTAAATAATTCATAAACCTATGGG
-----EXON 13-----

EXON NUMBER	EXON SIZE	5' SPPLICING SITE	3' SPPLICING SITE	INTRON SIZE
1			GGTCAGgtaaggcag	-600bp
2	124	cctttaaaagCCACCGC	AGCTCAGgtaagcttg	~6kb
3	137	gccccgcagGCTCCGG	CCTGCAGgtggcgcg	74bp
4	103	ctcctgcagAGCGACA	AAGGTGGgtgcagccc	~4kb
5	129	tgcaggtggAGGCCGT	GATCCTAgtaagtggc	~2kb
6	140	tgctggcagAGGTCA	TTTTTCAGgtaagaggt	~2.5kb
7	130	tctggtcagCTCTTTG	TTCTATAgtaagtgtt	~0.5kb
8	214	aacttttagTGGACCT	TCCTGAGgtaagaggc	100bp
9	206	tggttttcagGAGAGTG	AATCTGTgtaagtgcc	~1.7kb
10	139	catccccagTTCCCGT	GCTACTGgtgagggtt	~1.9kb
11	186	cttttctagGACGCTG	TCCTCAGgtaagatat	~5.3kb
12	113	tttcttaagAAACATA	ACTTGTGgtaagtatt	~1.2kb
13		ccttgacagGCAGCTC		
TOTAL				~25.9kb

NIC SEQUENCES IN CAPITAL LETTER

FIG. 14B.(3 OF 3)

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☒ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.